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ABSTRACT

This study explored how students diagnosed with Attention Deficit/Hyperactivity Disorder (AD/HD) enrolled at public and private universities in southwestern Arkansas survive college. Interviews were held with 10 such students. The resulting theory derived from the information provided by these students includes themes related to student attitudes about their diagnosis, adapting to college, and recommendations for students, college personnel, and parents. The most important recommendation arising from this study is the development of training for administrators, faculty, and students to help them see the lived reality of AD/HD students. (Contains 24 references.) (SLD)



Running Head: STUDENTS WITH AD/HD

An Analysis of College Students with AD/HD at a Private and Public Institution in

Arkansas using a Grounded Theory Approach

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(Paper presented at the 2002 Mid-South Educational Research Association in Chattanooga,

Tennessee)

Abstract

The intent of this study was to explore how students diagnosed with Attention Deficit/Hyperactivity Disorder (AD/HD) matriculated into a public and private university, located in southwestern Arkansas, survive college. To explore this phenomenon, the researchers captured the stories of 10 college students. The resulting theory explaining the phenomenon included themes related to student attitudes about their diagnosis, adapting to college, and recommendations for students, college personnel, and parents.



According to researchers, a large percentage of Americans with Attention Deficit
Hyperactivity Disorder (AD/HD) are underrepresented in the American higher education system.
Researchers estimate that approximately 15 million Americans suffer from symptoms related to
AD/HD (Hallowell & Ratey, 1994) based on the DSM-IV (1994) criteria. However, less than
9% of adults diagnosed with AD/HD enroll in college (Barkley, 1990). Of those adults who do
enroll in college less than 5% graduate as compared with 40% of students who are not diagnosed
with a disability (Weiss, Hechtman, Milroy, & Perlman, 1985). This represents a relatively
untapped segment of the population who are either not self-selecting higher education or not
succeeding once they matriculate to college.

The primary obstacle in choosing to advance education for adults diagnosed with AD/HD may be related to low self-esteem. Researchers have discovered over the past decade that low self-esteem is one unfortunate consequence of AD/HD that, in turn, leads to depression, and feelings of inferiority and isolation (Bramer, 1994; Green & Chee, 1998; Slomkowski, Klein, & Mannuzze, 1995). For those adults who do matriculate, many find that they are not prepared to succeed in the academy. Researchers postulate that some of these students come to higher education with symptoms of AD/HD, but without a diagnosis. These students manage to survive secondary education by using teacher, peer, and family support structures (Barkley, 1990; Malakpa, 1997). However, once they enter the world of advanced scholarship and learning, they discover that the old support structures are either not available or are no longer sufficient (Hechtman, Weiss, Perlman, & Amsel, 1999). Without a diagnosis and the benefit of years to adjust to their disability, these students not only do not understand how to self-accommodate, but do not know about the important support structures available to them on the college campus.



Students diagnosed with or demonstrating the symptoms of AD/HD have a multitude of reasons for not succeeding in college. These students self-report insufficient academic preparation for college level work (Hurst & Smerdon, 2000), difficulty with English, vocabulary skills, and writing ability (Bramer, 1994), difficulty with timed essay writing (Javorsky & Gussin, 1994), and integrating information (Barkley, 1990). According to research conducted by Henderson (1999), students with disabilities, in general, self-report lower perceptions of ability as compared with students without disabilities in a variety of areas to include: (a) cooperativeness, (b) intellectual self-confidence, (c) emotional health, (d) overall academic ability, (e) writing ability, (f) mathematical ability, and (g) drive to achieve. Interestingly, Henderson found that students with disabilities self-report a more positive perception of their artistic and creative ability as compared with their peers who do not have a disability.

All of these factors from low self-esteem to a perceived diminished ability to perform academically equates to the inability of a large percentage of the American population in reaching their full potential. This is problematic for the future well-being of these citizens; it is chilling in terms of economic growth and productivity for the United States. The good news is that an increasing number of adults diagnosed with AD/HD are choosing an advanced degree. According to Henderson (1999), in the specific category of learning disabilities, which includes AD/HD, the population had increased by 26% from 1988 to 1998.

This percentage in growth is encouraging for recruitment but daunting for retention.

Attention Deficit/Hyperactivity Disorder is currently the fastest growing diagnostic category for adults (Wallis, 1994). This means, of course, that a large percentage of young people struggle with the symptoms of AD/HD without the knowledge of AD/HD medication and support well into adulthood, and just at the point of college matriculation. The consequences of this situation



are problematic for higher education faculty and staff. First, as mentioned earlier, is the missed opportunity of these adults to benefit from years of learning to adapt to their disability prior to entering the world of advanced learning (Fisher & Beckley, 1999). Second, depending on the timing of the diagnosis, it is quite possible that these adults are struggling with the emotions of the AD/HD diagnosis at the same moment that they are managing the transition into college. Finally, it is reasonable to deduce that if these individuals maneuvered secondary education without a diagnosis, they may slip through the diagnosis cracks altogether, therefore, missing the chance for much needed help while in college (Ingram, Hechtman, & Morgenstern, 1999).

Couple the two variables together – increasing numbers of students diagnosed with AD/HD entering college and AD/HD as the fastest growing category for adults – a formula for increasing attrition looms large unless contemporary colleges and universities are prepared to meet the challenge of retaining this vulnerable student population (Denckla, 1993; Silver, 2000). Unfortunately for faculty and staff there are a multitude of hurdles embedded in this one unique challenge. For example, how does an institution identify those who have not been diagnosed? Once the student is identified, how do faculty and staff encourage him or her to seek help? What about those who are never identified? How do they influence the productivity of the classroom and the culture of the institution? Worse yet, how does the missed opportunity for support influence his or her success? Some of the best answers to these important questions may come directly from those students diagnosed with Attention Deficit/Hyperactivity Disorder.

Obviously, the more that is known about the influence of AD/HD symptoms on the success or failure of college students, the better prepared faculty and administrators are in fighting the battle of challenging recruiting and increasing attrition. Extant literature offers scholars a wealth of research findings about the AD/HD diagnosis and experiences of those



living with the disability (Atkins, 1996; Barkley, 1990; Weiss, 1992; Silver, 2000; Weiss, Hechtman, & Weiss, 1999). Research reports about college students diagnosed with AD/HD are minimal, but increasing (Heiligenstein, Guenther, Levy, Savino, & Faulwiler, 1999; Willis, Hoben, & Myette, 1995). As more knowledge is gained about AD/HD and the consequence of an AD/HD diagnosis, more research is needed updating what is currently known about AD/HD and the American college student (Bramer, 1994; Eaton & Wyland, 1996; Heiligenstein, et al., 1995; Quinn, P., 1994; Willis, et al., 1995). Research relating the stories of college students attending a variety of postsecondary institutions helps to inform future policymaking for this vulnerable population and the development of valid strategies to help these students succeed.

Method

Therefore, the intent of this study was to explore how students diagnosed with AD/HD who matriculated into a public and private university located in southwestern Arkansas survive college. To fully understand the phenomenon, the researcher explored student attitudes about their diagnosis, experiences with education, strategies used to succeed in education, and important support structures for success. Using a qualitative research design from a grounded theory perspective, the researcher captured the personal stories of ten college students from two universities similar in location, size, and liberal arts tradition. The research conversations took place during the 2001-2002 academic year.

Sampling

The sampling criteria included students (a) diagnosed with AD/HD as their primary disability, (b) who provided documentation to the Office of Disability Support at one of the Arkansas institutions, (c) currently enrolled in a public or private, four-year college in southwestern Arkansas, (e) currently enrolled in undergraduate courses, and (f) between the ages



of 18 and 24 years old. The researcher worked with the Director of the Office of Disability Support at both institutions to recruit volunteers for the study. A total of 14 students diagnosed with AD/HD attended the public institution of which two participated in the main study. A total of 25 students diagnosed with AD/HD attended the private institution. Of the 25 students, 11 participated in the study (3 students participated in the pilot study and 8 participated in the main study).

The two institutions chosen for this study were located in the same town in southwestern Arkansas. The population of the town was approximately 10,900 people in 2001. Both institutions had a stated liberal arts mission and tradition. The private religious university enrolled approximately 1800 students in the 2001/2002 academic year. The private university offered undergraduate degrees, only, with a stated mission of preparing students for leadership and service. The public secular university enrolled approximately 3500 students. The mission of the university was to foster exemplary undergraduate degrees in the arts and sciences, and undergraduate and graduate degrees in teacher education and business administration.

Because the stated phenomenon included a private and public university for the purpose of ensuring diverse perspectives within the sample, the researcher purposively chose two institutions that were similar in location, size, and liberal arts tradition. The primary difference between the two colleges related to the public/private distinction and the mission of the institution. Coupled with the sampling criteria for this study, this purposive selection of universities filtered noise from a variety of variables extraneous to the study. Furthermore, the original intent of the study was to compare data collected from the public university with data collected from the private university. Because of insurmountable problems in recruiting volunteers from this vulnerable population, the final sample included more students from the



private university as compared with the public university. Therefore, a comparison of the two was invalid.

The students in the study represented a broad range of discipline areas to include music education, mass communication, biology, psychology, business, nursing, Spanish, theology, and physical education. Of the 10 students that participated in the main study, three were white females and seven were white males. Two students were diagnosed by a doctor when they were six to nine years old. Three students received their diagnosis during their adolescence. Five students received their diagnosis while attending college. All students indicated that a psychiatrist, psychologist, neurologist, or a specialist in AD/HD performed the diagnosis. Some of the students indicated that they suffered with severe symptoms, while others stated and exhibited less notable manifestations of Attention Deficit/Hyperactivity Disorder. The actual classification of each participant's AD/HD was not accessible.

Pilot study

The researcher chose the private university to conduct the pilot study because that university had the largest number of students who presented documentation to the Office of Disability Support confirming their AD/HD diagnosis. The researcher conducted a pilot study to test the data collection and analysis protocol, the interview script, and the interview skills of the researcher. The lessons learned from the pilot study informed changes made to the main study to improve the reliability and validity of the final research report explaining the phenomenon.

Recruitment Protocol

In the first step of the recruitment protocol, the researcher contacted the director of disability support at the private institution to work on a plan for recruiting volunteers. Due to privacy issues, the director could not to give the researcher the names of the students registered



with their office. Therefore, the initial communication with college students diagnosed with AD/HD was made through the director's office. In the second step of the protocol, the researcher drafted a letter requesting volunteers for the study that was mailed to students by the disability support office. The letter fully explained the (a) purpose of the research, (b) data collection method, (c) informed consent process, and (d) protection of student anonymity. The director also included a letter that introduced the researcher to the students, encouraged students to participate in the pilot study, and requested interested students to directly call the researcher.

Third, letters were mailed to eight students chosen in a purposive, convenience sampling format from the total AD/HD population registered with the disability office. Two students that received a mailing contacted the researcher by telephone to volunteer for the study. A third student approached the researcher to volunteer for the pilot study after hearing about the study in the researcher's class. In the fourth and final step in the recruitment protocol, the researcher contacted each volunteer to schedule a research conversation. Once the conversations were scheduled, the researcher contacted the volunteers twice by telephone to remind students of their appointment.

Data Collection Protocol

The researcher conducted a focused research conversation with three students that lasted approximately 3 hours. The researcher met with the students, simultaneously, at a local restaurant. The incentive for participation was a free meal during the interview. The researcher used a semi-structured interview script that included the main interview questions. Probing questions were asked to ensure an in-depth exploration of the topic. The interview was tape-recorded to ease data collection.



Data Analysis Protocol

In the first step of the data analysis protocol, the researcher wrote notes about the interview immediately after each research conversation was completed. Subsequent to reviewing the research notes and listening to the taped conversations, the researcher decided to conduct an additional interview with two of the volunteers to fully explore the topic. Immediately following the final interviews for the pilot study, the researcher open coded the transcripts for the second step in the protocol using NUD*IST Software for Qualitative Data Analysis (Version 5). During the open coding step, the researcher listed conceptual labels on feelings and events on the transcript. In the third step, the researcher axial coded the open codes by linking categories that shared a common theme. Fourth, the researcher selectively coded the data by merging the axial codes into overarching patterns that explained the phenomenon. Finally, an external auditor reviewed the entire coding process to ensure the validity of the resulting theoretical framework. Lessons Learned from the Pilot Study

The primary lesson learned from the pilot study was related to the challenge of recruiting study volunteers from the AD/HD population. As mentioned earlier, only two students out of eight responded to the letter from the director and the researcher requesting their participation in the study. Based on this experience, the researcher contacted the director from each university and developed a plan to mail up to four letters in an attempt to recruit volunteers. The researcher also discovered in the pilot study that students were hesitant to participate due to a fear of jeopardizing their confidentiality. Because of this information, along with the difficulty of getting students to volunteer for the pilot study, the researcher decided to add more information on the confidentiality of the study in the recruitment letter for the main study.



In addition, the pilot study gave the researcher the opportunity to practice interviewing skills and develop strategies to ensure in-depth conversations with volunteers. Finally, due to information gleaned from the pilot study, the researcher perfected the interview script and included additional interview questions related to college student experiences.

Main Study

Recruiting Volunteers

As with the pilot study, the researcher provided both directors with a letter to mail to students with documented AD/HD on each campus. The letter included information about the study, the confidentiality agreement, and a request for volunteers. The directors also attached a letter which encouraged students to participate in the study with instructions to call the researcher to volunteer for the study. A total of four letters were sent by the Office of Disability Support at the private university over a period of two months to the remaining 17 students diagnosed with AD/HD. Three letters were separately mailed over three months to 14 students at the public university. At the completion of the recruitment phase, eight students from the private institution and two students from the public institution volunteered to participate in the research conversations.

When preparing for the student interviews, the researcher either called students or sent them a letter in the mail at least twice before each interview to remind students of their appointment. If the student did not attend the interview, the researcher called the student to reschedule. Even with this strategy, the researcher experienced several problems in recruiting from this vulnerable population. Students diagnosed with AD/HD who attended the chosen public and private university were reluctant to participate in the research study due to time constraints, scheduling problems, and concerns about confidentiality. In some cases, those who



did volunteer frequently forgot interview appointments or dropped-out of the study for a variety of reasons.

Because of this problem, the researcher was forced to break protocol on several occasions to recruit volunteers for the study. Since the protocol was designed to ensure a valid representation of the entire phenomenon by the voices heard, this break from the protocol is an important limitation to that validity. Therefore, the researcher employed an intensive auditing procedure of the entire research process to reduce the validity limitation.

Data Collection

The researcher conducted interviews with each of the 10 volunteers. All of the interviews took place in a secluded area of a restaurant away from campus in an effort to protect student confidentiality. At the beginning of the interview, the research explained the purpose of the study to the volunteer, discussed the confidentiality process, and ask the volunteer to sign an informed consent form. Additionally, the researcher notified the volunteer that the session would be tape-recorded and asked for permission to record the session.

With introductions completed, the researcher used an interview script that included eleven main questions designed to stimulate conversation with the student. Probing questions were used as needed to elicit in-depth conversation or to enhance clarity of a student's response. Of the 11 main questions, six were designed based on extant literature about college students diagnosed with AD/HD and their experiences on a higher education campus. The remaining five questions were developed after the pilot study and were a result of the lessons learned from the pilot. All of the questions were intended to provide the researcher with important information explaining the stated phenomenon.



Data Analysis

Due to the recruiting problem, the researcher did not have the luxury of pre-determined interview appointments allowing for time to code each transcript after each interview.

Therefore, the researcher used a research log to note important themes emerging from each interview. Prior to the next interview, the researcher reviewed notes in the log and listened to the tape-recording of all previous interviews. This strategy was employed to prepare the researcher for the next interview and remind the researcher of data contradictions that required further exploration in the next interview.

After all interviews were completed, the researcher began the data analysis phase using the grounded theory approach of Strauss and Corbin (1998). In the first step, the researcher open coded each transcript writing memo statements about the open codes in the research log. In this open coding step, the researcher open-coded by reading each transcript and documenting first impressions of the coding categories. Second, the researcher inputted the transcripts and open coded data into NUD*IST Software for Qualitative Data Analysis (Version 5), to begin the axial coding process. Third, two internal auditors were used to verify the coding process. The auditors simultaneously coded three transcripts. Once the researcher and auditors completed coding, they met to compare codes and negotiate differences. This process ensured the validity of the final research reporting of the phenomenon.

The researcher created the axial codes by hand. Using the open coded hard copies produced by the computer program, the researcher linked categories based on the characteristics and range of the open codes to form a more precise phenomenon. A theory diagram was created using the axial codes. This diagram changed as the researcher grounded the resulting theory in the experiences of the volunteers. In the fourth step of the data analysis protocol, the researcher



engaged in selective coding to refine the resulting theory. The researcher reviewed the theory diagram for density throughout the coding process by examining the properties and dimensions of the themes, and ensuring a representation of the range of variability within the patterning of the categories. In the fifth step of data analysis, the researcher re-examined those areas considered special categories, because of rarity, by reviewing the data to ensure information from other cases were not overlooked. The researcher reported any extraneous cases in the final theory to improve the validity and explanatory power.

With the framework explaining the phenomenon completed, the researcher engaged in the final step of the data analysis process by attempting a member check of the theory. The purpose of the member check was to enhance validity. Unfortunately, the members asked to participate in the member check never responded back to the researcher. Therefore, the researcher engaged in a final audit using an external auditor to review the entire research process from recruitment to data analysis in both the pilot and main study. The purpose of this external audit was to ensure the generalizability from the voices heard to the theory developed.

Results

The researcher identified nine constructs exploring the intent of the study by explaining (a) the AD/HD diagnosis, (b) medication, (c) the AD/HD experience during adolescence, (d) the freshman year, (e) adapting to college, (f) college environments, (g) student motivation, (h) attitudes about public and private institutions, and (i) advice for students, college personnel, and parents.

The AD/HD Diagnosis

The first construct included themes related to the positive and negative feelings these students felt after hearing about their AD/HD diagnosis. For some students, the diagnosis was a



relief, "it made me realize that it wasn't just me being rude, interrupting. Or it wasn't me not wanting to grow up and quit talking....There were reasons. That doesn't excuse that I shouldn't work on it, but at least I have a name [for] it." Other students seemed frightened by the diagnosis, "I didn't want to believe it at first cause I didn't want to think that something was wrong with me."

The students that participated in this study also talked about their parents' reactions to the diagnosis. Some students reported that their parents did not believe the diagnosis. As one student stated, "He's offended almost that I have ADD....my dad's like-'You don't have ADD. You got a 3.9 GPA in high school. You're a Dean's List student in college." Other students discussed parents that appeared relieved with the diagnosis providing their child with valuable support. One student asserted, "They took it real well. They're supportive with it....We suspected . . . that something wasn't totally right."

Medication

The researcher found three major themes within the construct of having AD/HD and taking medicine. Students listed a variety of medication they took to control their AD/HD symptoms, to include Ritalin, Adderal, and an anti-depressant. Other students indicated that they were using a natural remedy coupled with trying to control their diet to manage their disorder. The first theme within this construct related to medication and when students took their medicine. According to one student, taking their medication, "just depends on what activity I'm doing. I mean, if it's something I have a lot of autonomy, and I'm not going to be disrupting anybody, I won't ever take a Ritalin. Now, if there's somewhere I have to be sitting still, that's the key thing. If I've got to sit still through anything; I'm taking a Ritalin. Just cause I can't get



comfortable....and [then] I'm on to something else." Many students said, "I only take it when I have to study something cause it helps my concentration."

Whereas students recognized the value of medication, they also understood that the medication did not, could not, cure their disorder. One student stated that even though her grades improved while taking the medication, "I still talk up a storm, and I still do this and that. So [my AD/HD] really hasn't changed in that respect." In addition, participants discussed negative side effects related to the medication. One student, taking Ritalin, stated "it made my body feel weird. Sometimes it started making me feel depressed.... I just started feeling deep depression and more anxiety. I didn't like that."

The AD/HD Experience during Adolescence

Even though the researcher did not ask a question about adolescence, almost all of the students talked about experiences from their adolescent years that shaped their attitude about their disability. For many students those lived experiences revolved around the attitude of their parents concerning the diagnosis. "Like they'd always get mad at me because I couldn't never [sic] pay attention....They'd sit down and try to explain something and I just could not pay attention. And then I guess...we were trying to study....and I just told them I couldn't do it. I tried and I really couldn't. And so they made me mad, but they would get mad at me." From a different perspective, another student advised parents to prevent adolescents from using their AD/HD as "an excuse for [their] personality and to not treat them like mama's boys [where] everybody does everything for them because they have AD/HD."

Additionally, students talked about the negative attitudes of some high school teachers.

One student reminisced about a time when his teacher tried to get him extended time on exams.

"It was a struggle with a lot of teachers because a lot of them didn't believe in ADD. Their like-



'Oh, you're just using that as an excuse.'" Students shared feelings of isolation while working in the school's resource room. "I didn't like [the resource room] because I felt like I was being secluded. They would remove me from the classroom and put me into a smaller classroom, which was good, but then at the same time...I didn't like it because then everybody was like 'Where's she going?' and then I have to say 'I [am] going to resource.' And then people would be like 'What's wrong with you?,' you know?"

The Freshman Year

For many individuals, the encouragement of their parents heavily influenced their road to college. As one student stated, "[My parents] told me I wasn't going to sit at home and be a bum for a year....I wanted to do college and they thought I could. My dad was really honest. He said-'Bill, it's going to be really hard for you, but you can do it.' So, he gave me . . . the confidence to go through it." Other students said it was just apart of their culture to go to college. "I guess it was just like assumed that I would go [to college] because my dad had been saving like, you know, money for us since before we were born. And so, I guess it was just always planted in stone that we were going to go to college."

College

The students in this study talked about the challenge of adapting to the advanced learning required in college. "It's been tough and it's tougher with ADD and [to] make the grades, to pay attention, regurgitate all that stuff back out. It really is pretty tough." Connecting the college experience with their diagnosis, these students also talked about the issue of confidentiality and disclosure. Some students willingly shared their AD/HD diagnosis with their peers, while others were more discrete. "It's not something I hide, so I think because I am so open with it, a lot of people think I'm different. I really don't care. I care about myself, but I don't care necessarily



what people think about it, that I have ADD." On the other hand, one student stated, "Thirty students in a classroom [the professor forgot about my accommodation]. So, I have to remind them [sic]. So, I have to do that in a discrete way to maintain confidentiality."

College Environments

The themes included in this construct revolved around the frustration of continued AD/HD symptoms, positive attributes related to having AD/HD, study strategies and self-accommodation, the need for external help, and preferred accommodations. When the researcher asked the students to explain what it was like to have AD/HD symptoms, one student commented, "Yeah, well [people need to] take it seriously. Obviously, people with ADD know how immobilizing it can be sometimes." Another student described having AD/HD as, "ADD does not describe me, it is me....it's not just two or three things about me. It's like an octopus cause it has tentacles into every single aspect of me....I'm ADD. It affect[s] everything."

Symptoms. Although most students with AD/HD stated that some of their symptoms had improved, they still had to deal with continuing challenges. "I will never out grow it, but I think I've just learned to compensate better....I'm not as obnoxious [as I was before]." Other students felt their symptoms were increasing in frequency because they were not receiving the same one-on-one help they enjoyed in high school or while living at home. "I see differences like when I was in middle school or high school, like, I was in resource and all that kind of stuff, they kind of did all my organizing for me. And so, now I come to school and it's just like, 'Whoa! What do I do?'"

One student talked about the link between his symptoms and depression. "I was struggling with my ADD. And the ADD brought me into depression last semester because I was so focused on studies and like last semester I cut out everything. I moved into an apartment all



by myself. Away from all the dorms. Away from all these distractions. I didn't have cable or Internet, TV stations of any kind in my apartment. 'I'm going to stay on task. I'm not going to get distracted.' And I still couldn't do it, and it brought me into depression cause these professors were expecting so much of me. And I wanted to do it and if I didn't do it, they were like, 'Why aren't you taking me seriously?'"

Some of the symptoms these students discussed included a lack of ability to generalize information, being inattentive and impulsive, having a bad memory and slow processing speed, and difficulties in reading and math. "Making sure I understand how it relates. That's my biggest problem. I can memorize out the wazzoo. I am the best memorizer I know. I [have a] hard time relating it to things," said one student. Another student discussed how difficult it was to comprehend something, "You can read a question five times and still nothing goes through your mind." Another student discussed her inability to focus on studying. "My brother would do his homework and I [would] have to go do that [sic] homework. [And I would be] there's a spot on the floor. How did that get there? I bet it was coke or maybe it was Kool-Aid. I mean, seriously."

Some of the students that participated in this study shared their definitions of different AD/HD symptoms, such as impulsivity and processing speed. For example, one student described impulsivity as "[The ability to] do many things at once. Just not complete." Another student said, "I change the subject just because I get bored with what you're saying and [I] start thinking about what I'm going to say. I'm really bad about interrupting..." Other students described being over-talkative, "I've got a million question[s] at once in my mind. I want to know the answers to all these questions at once." Some characterized themselves as fragmented thinkers who had to always think about what they were about to say before jumping into the conversation. For some students, one troubling symptom was a poor memory. "I still have a lot



of trouble with certain things. I will get halfway through a sentence and completely forget what I was saying. I mean, [my friends will] remind me and [it] still won't come to me." Finally, one student defined process speed, "It just takes me so much longer to do everything compared to everybody else." According to these students, processing speed made reading more difficult. "I have to take about seven to eight minutes a page to absorb it [information] and then read through it again to see how it all connects...."

Views of AD/HD. While many students expressed negative views of having AD/HD, they also said AD/HD could have some positive attributes. One student said her sensitivity towards others was positive because, "I can relate to being able to put myself in other people's shoes....because if I was that person, and I didn't have any friends, I'd be lonely....I understand how, not necessarily what it's like to be in every situation, but I know what it's like to be in a lot. And it's not fun and so, I just don't want people to go through the same thing I did." Another student believed that everyone should have Attention Deficit/Hyperactivity Disorder. "I like to think of ADD as something people need, that everybody needs, I think, something in their life that helps them find their weaknesses." Peer attitude also affected how college students with AD/HD felt about their disability. A student discussed times when peers would openly disclose her disability to other students, "Especially, if it's like out in public and people can hear that don't know. That hurts. It just like-I want to tuck my head in my shell and crawl away and be like a turtle, you know?"

Studying. The researcher asked participants to describe how they study with their individual symptoms and to make recommendations to those students who are thinking about entering college. They stated that each person has to find their own study method. According to one student, "I just try and take good notes and try [to] pay attention in class. And then I go to



my room and look over the notes and everything. And then like after I memorize it, I like to go and bounce it off someone else."

Another student stated, "I was [doing] a lot of math. I was just constantly working problems till you get [sic] the hang of it. But some of the classes that you read a lot and recite definitions and all, I [made] note cards....I'll write them out on a note card and do one side and do the other just like flash cards. Rotate through and if I miss it, I put it back in the pile I'm going over, and I'll just do that until I get them all right." Other students thought studying in a group helped them the most. 'Like, if we talk about something, the more I talk about it, the more I understand it, and if I talk to you about this and you say the reason is 'la la la', then we can all ask questions and all that kind of stuff."

Accommodations. Most of all, students indicated that learning to self-accommodate and approaching professors for help were vital to college success. One of the self-accommodation strategies shared by many students was to enroll in fewer classes. "I can't take more than 12 hours and do what I love. I love to learn, and I love what I'm studying." A student described his ability to organize by explaining, "I'm a Post-It notes person. I've got notes everywhere. I've got a calendar. I just tried [sic] to keep well organized." "Plugging my ears help[s] tremendously" for a test or for study purposes, said another student. "I think that really helped me to be able to concentrate on the question [asked]."

Some of the accommodations students asked for included extended time to complete writing assignments and to take exams, having a note taker in class, and using a tutor. A student described a note taker as, "They'll take the notes, and I'll go to class and take notes, and I'll compare them." In addition to help with taking notes, many students relied on tutoring to provide them with academic support. According to one male student, tutoring was an important strategy



to ensure academic success. In selecting that all-important tutor, he had one pivotal criterion,

"...I [sic] got to have somebody who's able to tutor without getting mad at me. That's sometimes
a chore."

Accommodation letter. Of course, in order to receive accommodations at the college level, a letter must be delivered to the instructor so they know what type of accommodation to give the student. One student affirmed, "it's definitely a plus for your teachers to know." Other students shared a dislike of personally submitting an accommodation letter to professors because of unpleasant previous experiences that included negative verbal feedback from a professor to student perception of body language that communicated disapproval. One student described a time he had to give an accommodation letter to a professor. "....it's kind of hard if you're just talking to a wall, you know. 'Excuse me. You mind if I yada, yada, yada?' And you get nothing in return. I mean, come on." A female student suggested that the Office of Disability Support spare students the embarrassment of submitting accommodation letters because, "I'm, like, they might hate me. Like, seriously...Because, I'm not normal, and it proves that I guess."

A third piece in the accommodation letter triangle related to those students who preferred to have the letter mailed to professors ensuring peer confidentiality. As one student stated, "One time I even got [my accommodation letter] out before class and three different people passed it around, and I was like, 'Excuse me. Hello. That's mine'. Yeah, their like, 'Ooh, what's this? Ooh, I need to get me one of these forms. Then I'll be a good student.' And I'm all, 'No, no, no. You don't understand.' And I just felt like really small that day." Some students with AD/HD decided not to ask for accommodations for different reasons. One student asserted, "My philosophy is that the world is not going to make all these accommodations just for me. And I best deal with [it] while I can learn to deal with [it]..."



Professors. In addition to problems with the accommodation letter, some students felt that too many professors were not sympathetic to their disability. "Whenever we get to the college level, [professors] don't want to accept that we're [here]," explained a student. Some students believed that professors pressured them to conform to a "mold" of the perfect student. "They have this fit mold, like this cut gingerbread mold, and here's me. I am Santa Claus and they want a Gingerbread Man, and I don't fit in the Gingerbread Man cut out because I'm different. And they're like, 'Well I'm sorry. That's just the way it is.""

On the other hand, many students agreed that they had several positive experiences with professors. One student told of a professor who allowed him to come to another class to take his exam. "Like I had a class at 10 o'clock, and I had a class at 11 o'clock, and so whenever I had to....take [a] test [in his class]....he would let me come at his 1 o'clock class because I could take the test in enough extended time." Another student described a positive professor as someone who was "Enthusiastic. Warm-loving. Personal."

Student Motivation

This construct was built out of two themes that related to the attitude of successful college students with AD/HD and what they saw for themselves in their future. One student revealed a strategy he used to succeed in college. "Just keep encouraging, saying you can do it. And that's probably one thing that's helped me more than anything. I think one of the biggest things that ADD attacks is that [it] affects...confidence." Another student stated that someone with AD/HD must have the desire to do well in college in order to succeed. "Yeah. It's got to be a real desire, and I don't know if a university or public program can create that desire in a student. But like I know a lot of students here on campus kind of read the book. Kind of take the



test and kind of do it. Kind of get a B, and no problem. And they get out of college, and it wasn't anything. Someone with ADD has to be very deliberate."

When questioned about their future, students talked about becoming a(n) graphic designer, author of a non-fiction book, artist, musician, high school teacher, or college professor. One student proclaimed, "I don't see any reason why a person with ADD couldn't get a doctorate. They're just going to have to study, [because] they have the IQ and the knowledge to do it."

Attitudes toward Institutional Types

When the researcher queried those students who attended a private college to explain their decision, one student commented, "It was more well-rounded....there's more classes that integrate hands-on stuff." Another student commented, "I think private schools are really good because you get that smaller classroom size....You're not taught by a TA. You're taught by a professor, and they know your name, and he can stop by and give personal attention or help. They're there for you."

For those students who at one time or another attended a public institution, many thought they were easier for different reasons. One student talked about attending a larger, public, metropolitan institution, "I just commuted and lived in Little Rock. I found that it seemed to be a lot easier in a sense, that I didn't have as many people around to [distract me]." When this same student compared living in a dorm to having the opportunity to live in an apartment because of the commute, he said, "...when I'm at home doing stuff, I get so much done...."

Throughout the interview sessions, students shared their thoughts about the support structures they needed to survive in college. The majority of students interviewed stated that if

Advice to Students, College Personnel, and Parents



they could give a gold star to their institution for helping them in their journey, they would give it to the Disability Support Center. One student disclosed he really liked the way they tried to help and showed interest in keeping in touch with him. Students felt appreciated and understood when Disability Support Directors made sure students had useful accommodations, helped them learn how to prioritize and study, and called specialists to get more information on how to help them. Additionally, students shared tales about caring and compassionate faculty at their institution who had walked the extra mile to help students succeed.

These students also made suggestions for matriculating students with AD/HD, the Disability Support Center, professors, administrators, and family. One student advised high school students with AD/HD, "[To] learn how to study before you get [to college]. Take harder high school classes....My freshman year I didn't do all that super which is common for college students, but if you're already struggling, it blows people out of the water." For those students who knew they had AD/HD before entering college, a student suggested "...to go ahead when they're sending out applications to look into the disability programs and see what's out there. See if that might help them make a better choice which college to attend." While attending college, the participants in these research conversations talked of the need for support group sessions with other students diagnosed with AD/HD so they could talk to someone else "...cause we would all understand one another."

Every student recommended that professors, administrators, and other students receive disability training. "Yeah, let them know what it's like. Like, give them a scenario and let them, you know, put them in our shoes. And let them know how we feel. And how much, how overwhelmed we get and how much anxiety we have. You know, how we don't understand something cause it didn't make sense because we missed part of it." For those who might refuse



the training one student suggested, "I guess if you don't understand it, you don't believe you need to read up on it. And if you don't, you sure don't need to be teaching somebody with it."

Students had specific recommendations for professors. For example, one student recommended, "Just be patient. Cause we're not trying to be a smart-ass or anything if we're not getting it, but we ask you over and over...just to make sure that we got it. Go slow." Another student recommended that professors try a variety of testing alternatives to allow students with disabilities another option for demonstrating competency. One student said, "I'd rather apply it.

Like...do a presentation and get up there and talk...."

Students also had advice for administrators, and for parents. One student encouraged college administrators to search for alternative options to the traditional entrance exam eliminating the one-size-fits-all method of evaluating student merit. "I had them before, the ACT and the SAT. I made a 1000 on the SAT, which really is barely enough to get into this school. I came here and I've been on the President's List the last three years....People are individuals and can't be plugged into a system as much as we try." For parents, students talked of the importance of providing children with disabilities a supportive environment with a continuous flow of positive reinforcement. "It makes a big difference when [positive reinforcement] comes from your parents."

Discussion

Many adults with AD/HD try to live normal lives. A part of this normalcy is to attend college and receive specialized training in an occupation of their choice. However, many of these individuals never obtain that degree because of their varied needs in a restricted higher education setting. Those that do survive learn to pour themselves into the perfect college student mold created by a culture that does not accept deviation from the norm. Understanding the plasticity of



these students is the first step in explaining how they succeed in an environment filled with non-acceptance and ridicule for diversity.

These students talked about caring professors who treated them positively by examining their individual needs and offered help when needed. They discussed the unique situations that they dealt with in regard to obtaining academic accommodations from their professors because of their disability. They discussed how going to college was a form of metamorphosis for them because they not only had to change the way they studied, but they had to change their 'being'. For these students, college life was more than just getting up and attending class. For some individuals, it was discovering they had a disability and deciding what they were going to do about that disability in terms of confidentiality issues, medication, and how to overcome to 'become'.

Themes interwoven throughout the experiences of these students included those emotional feelings related to the unwillingness of people to understand them, participating in an environment laden with judgment or prejudice, and dealing with feelings of frustration with self and with others because of the consequences of that prejudice. These students talked of the importance of support networks on campus and beyond in giving them caring and compassionate guidance. They shared stories of the divergent attitudes encountered every day of their young lives. They spoke about the emotional baggage they carried onto the college campus, along with their book bag filled with college supplies and their dreams for a brighter future, baggage stuffed with painful memories from school, home, and community.

For these students, their very definition of AD/HD was shaped by unknowing or uncaring high school teachers and peers. Unfortunately, the "shape of their attitudes," for too many in too many situations, was colored by those individuals who simply labeled them as "lazy". The



outline of these shapes was drawn in a heavy ink representing the blackened self-concepts that, forever, haunted these students.

Professors who cared about their individualistic needs aided in the matriculation and retention of students with Attention Deficit/Hyperactivity Disorder. Students celebrated these devoted professionals who went out of their way to help them by allowing unlimited time of testing, or by actively listening as they discussed their disability and accommodations. Students applauded the few professors that were willing to share their time and expertise in helping the student understand complex material. Students knew these were the professors that would help them succeed.

On the flip side of the campus coin, students expressed concerns about an uninspiring college environment in terms of the internal college support structure that specifically dealt with accommodations, acceptance into the college life, and peer groups. Acceptance into college was a chore in itself because of the "student mold" created by administration and college faculty, and their unwillingness to look outside this segregating box. When requesting accommodations, many sensed that professors wished they could simply stuff the "disabled" into the "normal" box making them conform to the ideals of the perfect student, a perception that left many with feelings of inadequacy and weakened self-confidence.

Many of these students not only dealt with external support systems that created anxiety, frustration, and confusion, they also faced taunting internal demons of guilt and self-doubt.

Their emotions were weeds suffocating their garden of hope and invading their lives, weeds that made studying, socializing, making new relationships, and attending class strenuous. On the other hand, some students viewed symptoms of AD/HD as fertilizer containing unique



ingredients that nurtured student growth beyond the norm allowing students to blossom into adults who understand diversity and celebrate difference.

Recommendations for Practice

After talking with these college students diagnosed with AD/HD attending a private and public university in Arkansas, the most important recommendation linking this research to practice is the development of training programs for college administrators, faculty, and students to help them understand the lived experiences of these students. Students with disabilities want significant others to know about their disability, to understand their frustration, and to appreciate their daily struggle. These students recommend training sessions that teach the facts, eliminate the fiction, and open the mind of others to a reality with multiple and interlocking "molds".

Such a training session might include role play, presentations by individuals with AD/HD, and reading the stories of those struggling to succeed. Disability support administrators could offer mini-workshops scheduled at varying times and locations congruent with faculty, staff, and student schedules. Possible topics might include college students with AD/HD and their first year experience; the positive and negative experiences these students perceive while they attend college; student attitude about the AD/HD diagnosis; and what can be done to make college careers more successful. Additionally, these students want training sessions for others that emphasizes issues related to confidentiality.

Other training ideas gleaned from the qualitative data include training for students diagnosed with AD/HD related to; (a) their rights under disability law, (b) appropriate study techniques congruent with their disability, (c) learning to self-advocate and self-accommodate when necessary, (d) understanding their learning style and the strengths of that style, and (e) the services provided by their institution to support students with Attention Deficit/Hyperactivity



Disorder. Based on the findings from this study, the researcher recommends that directors of disability support programs should send surveys to instructors, administrators, and students to ascertain what their needs are in terms of disability information allowing administrators to design valid training programs.

Finally, based on the data collected in this study, college students diagnosed with AD/HD need an opportunity to visit with other diagnosed students to discuss the opportunities and challenges of their diagnosis. Hopefully, these opportunities naturally evolve in a college setting where students are encouraged to interact, work in groups, and share ideas. Hopefully, this evolution naturally pushes students diagnosed with AD/HD together so that they can form important bonds of friendship and support. But, what happens when the natural does not occur? Admittedly, it is difficult to make those who wish to conceal their disabilities, who wish to conform to the mold, open up and seek out those students who share a common challenge. However, it is apparent that at some level of consciousness these students simply need time to talk with students "just like them".

Recommendations for Future Researchers

Due to the difficulty of getting students to participate in this study, the researcher asked the disability support directors for their input on improving participation by students diagnosed with AD/HD for those researchers who wish to replicate this study. Both directors suggested offering students some level of monetary compensation for their participation but cautioned future researchers that the approach may not result in success. According to one director, several students inquired about the study but indicated that they could not participate in the interview process because of time commitments. This finding, alone, is discouraging to the qualitative researcher. However, it underscores the fact that qualitative researchers interested in research



conversations with AD/HD students must be creative in finding ways to engage these students with minimal time investment. E-mail or web-based interviewing might be one option to minimize the time investment. Perhaps scheduling the interview during the lunch or dinner hour, as done in this study, might entice students to participate.

More damaging to future qualitative research with this population is the belief stated by the directors that some students chose not to participate because they did not want to be thought of as "special education students". Quite obviously, the protocol designed for this study of using the directors to gain access to students emphasized the uniqueness of their participation in the college community, a uniqueness that they did not wish to emphasize. Because of privacy issues, the protocol used is the norm for this vulnerable population. Therefore, a vicious cycle emerges that inherently defeats the goal of recruiting volunteers for research conversations. Of course, if disability support administrators develop training sessions for these students and support discussion groups, they could include the importance of participating in research concerning the vulnerability of the AD/HD population as a discussion topic. This strategy might produce a student population that would be receptive to on-going research participation.

Aside from the time commitment and unique concerns of this population, the disability support directors offered additional suggestions to recruiting students with AD/HD to participate in research. For example, the directors suggested the use of e-mail to contact students instead of mailing letters indicating that their offices had greater success with e-mail communication.

Students seemed to respond faster to e-mail messages than to mailed letters. They also suggested that directors take advantage of student traffic in their office to recruit volunteers for the study by endorsing and emphasizing the importance of the study in a face-to-face format. Finally, they encouraged researchers to schedule interviews during a meal and offer free food.



Obviously, the importance of the disability support director to the success of a research project can not be understated. Therefore, it is critically important that any researcher interested in interviewing this vulnerable population first develop a quality professional relationship with the director and ensure director support for the research. In addition to working with the director, the interviewer must have an expertise in AD/HD to reassure students that they are talking with someone who truly understands their disorder. This reassurance is not only a factor in recruiting volunteers, but it is an important component to ensure honest and in-depth research conversations. Finally, keeping in mind that the population for this type of research self-admits to problems with time management, prioritizing responsibilities, and staying focused, multiple reminders of the interview appointment is necessary to help these students remember their commitment.



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